

AMENDMENTS TO THE CLAIMS, COMPLETE LISTING OF CLAIMS
IN ASCENDING ORDER WITH STATUS INDICATOR

1. (Previously Presented) A method for inhibiting bone resorption by inhibiting osteoclast formation which comprises exposing cells to ultrasound in a culture containing an osteoclast precursor and an inducing factor of osteoclast formation and /or bone resorption.

2. (Previously Presented) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 1 wherein said inducing factor comprises at least one factor selected from the group consisting of macrophage colony-stimulating factor, osteoclast differentiating factor, tumor necrosis factor, interleukin-4, and vascular endothelial cell growth factor.

3. (Previously Presented) A method for inhibiting bone resorption by inhibiting osteoclast formation which comprises exposing cells to ultrasound in a co-culture containing an osteoclast precursor and a supporting cell for osteogenesis.

4. (Previously Presented) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 3 wherein said co-culture system comprises at least one cell selected from the group consisting of osteoblast, stroma cell, fibroblast, T-lymphocyte and B-lymphocyte.

5. (Previously Presented) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 3 wherein said co-culture comprises an inducing factor of osteoclast formation and/or bone resorption in the co-culture medium.

6. (Currently Amended) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 5 wherein said inducing factor comprises at least one factor selected from the group consisting of macrophage colony-stimulating factor, osteoclast forming factor, tumor necrosis factor, interleukin-1, interleukin-3, interleukin-6, interleukin-11, interleukin-15, interleukin-17, prostaglandins, parathyroid hormone, parathyroid hormone-

related peptide, granulocyte macrophage colony-stimulating factor, active vitamin D and its derivatives thereof.

7. (Previously Presented) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 4 wherein said co-culture comprises an inducing factor of osteoclast formation and/or bone resorption in the co-culture medium.

8. (Currently Amended) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 7 wherein said inducing factor comprises at least one factor selected from the group consisting of ~~macrophage~~macrophage colony-stimulating factor, osteoclast forming factor, tumor necrosis factor, interleukin-1, interleukin-3, interleukin-6, interleukin-11, interleukin-15, interleukin-17, prostaglandins, parathyroid hormone, parathyroid hormone-related peptide, granulocyte macrophage colony-stimulating factor, active vitamin D and its derivatives thereof.

9. (New) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 1 wherein said ultrasound is a low-output pulsed ultrasound comprising a series of bursts wherein a wave component in a burst has a frequency of 1.3 to 2 MHz; a repetition frequency of bursts is 100 to 1000 KHz; a width of a burst is 10 to 2000 μ sec; and an output intensity of a burst is 100 mW/cm² or less.

10. (New) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 9 wherein said wave component in a burst has the frequency of 1.5 MHz; said repetition frequency of bursts is 1 kHz; said width of a burst is 200 μ sec; and said output intensity of a burst is 30 mW/cm².

11. (New) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 3 wherein said ultrasound is a low-output pulsed ultrasound comprising a series of bursts wherein a wave component in a burst has a frequency of 1.3 to 2 MHz; a repetition frequency of bursts is 100 to 1000 KHz; a width of a burst is 10 to 2000 μ sec; and an output intensity of a burst is 100 mW/cm² or less.

12. (New) The method for inhibiting bone resorption by inhibiting osteoclast formation according to claim 11 wherein said wave component in a burst has the frequency of 1.5 MHz; said repetition frequency of bursts is 1 kHz; said width of a burst is 200 μ sec; and said output intensity of a burst is 30 mW/cm².

13. (New) A method for increasing bone mass comprising exposing bone to ultrasound wherein said ultrasound is a low-output pulsed ultrasound comprising a series of bursts wherein a wave component in a burst has a frequency of 1.3 to 2 MHz; a repetition frequency of bursts is 100 to 1000 KHz; a width of a burst is 10 to 2000 μ sec; and an output intensity of a burst is 100 mW/cm² or less.

14. (New) The method for increasing bone mass according to claim 13 wherein said wave component in a burst has the frequency of 1.5 MHz; said repetition frequency of bursts is 1 kHz; said width of a burst is 200 μ sec; and said output intensity of a burst is 30 mW/cm².